

In the Office Action dated August 13, 2002, claims 20-27 and 35-48 are pending and under consideration. Claims 43-48 are allowable. Claims 20-27 and 35-37 are rejected under 35 U.S.C. §112, first paragraph. Claims 20-27 and 39-42 are rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite. Claims 41 and 42 are rejected under 35 U.S.C. §112, first paragraph (written description). In addition, the Examiner has also requested that Applicants provide a certified copy of the foreign priority document.

This Response addresses each of the Examiner's rejections. Applicants therefore respectfully submit that the present application is in condition for allowance. Favorable consideration of all pending claims is therefore respectfully requested.

Regarding the foreign priority document, Australian Patent Application PO2246/96, a certified copy of this document was submitted to the United States Patent & Trademark Office on December 1, 1997 in the parent application, Serial No. 08/928,720. Therefore, Applicants respectfully submit that it shall not be necessary to file a certified copy of the priority document in the present application.

Respecting the claims, Applicants respectfully submit that claims 20, 35, 37 and 39 have been amended such that references to SEQ ID NO: 24 and to SEQ ID NO: 25 have been deleted from the claims. The subject matter encompassed by original claims 20, 35, 37 and 39 insofar as it relates to SEQ ID NO: 24 and to SEQ ID NO: 25 is now delineated in new claims 49-56. Claim 26 has also been amended to properly depend from newly added claim 49. No new matter has been introduced by the foregoing amendments.

With regard to the rejection of claims 20-27 and 35-37 under 35 U.S.C. §112, first paragraph, the Examiner contends that the specification has not provided sufficient guidance as to how to make and use the polypeptides which are not 100% identical to the polypeptides of

SEQ ID NO: 13, 15, 17, 19, 25 or 29, but which still retain a desired property of the polypeptides of SEQ ID NO: 13, 15, 17, 19, 25 or 29. Applicants previously submitted that it is within the ken of those skilled in the art to make polypeptides which are not 100% identical to the polypeptides of SEQ ID NOs: 12, 15, 17, 19, 25 or 29 but still retain a desired property of said polypeptides. The Examiner argued, however, that it is not clear what desired property the variant polypeptides should retain. The Examiner alleges that the specification has not provided guidance or information as to which sites should be conserved and which sites could be modified without affecting the functional property of the protein.

Applicants respectfully submit that the substitution of an amino acid for a conformationally similar amino acid with similar hydrophobic or hydrophilic properties would have been routine at the time the present application was filed. Applicants further submit that, based on the teachings of the present specification, it would have been routine for one skilled in the art to generate any number of polypeptides which are not 100% identical to the polypeptides of SEQ ID NOs: 12, 15, 17, 19, 25 or 29, and to determine whether these polypeptides have a desired activity. Applicants therefore request that the Examiner reconsider and withdraw the rejection of claims 20-27 and 35-37 under 35 U.S.C. §112, first paragraph.

Claims 20-27 and 39-42 are rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite.

More specifically, the Examiner states that claims 20 and 39 recite "high stringent conditions" without defining these conditions. The Examiner suggests that these claims be amended to supply specific conditions supported by the specification. Furthermore, the Examiner contends that the hybridization conditions recited in clam 41 are vague and indefinite, because the recited conditions encompass a wide range of formamide and salt concentrations. In

addition, the Examiner states that the low temperature of the washing conditions is considered to provide medium, not high, stringency.

In response, Applicants have amended clam 39 to include specific high stringency hybridization conditions as comprising "at least about 31% v/v to at least about 50% v/v formamide for hybridisation, and from at least about 0.01M to at least about 0.15M salt at a temperature of at least about 42°C for washing." Such recitation of the conditions is supported by claim 41, and claim 41 is therefore canceled by way of the present amendment as duplicative. Applicants respectfully submit that these conditions are clear to those skilled in the art and are not indefinite. In addition, Applicants reserve the right to file a continuing application to pursue the subject matter of claim 39 as originally filed.

In view of the foregoing, it is respectfully submit that the rejection of claims 20-27 and 39-42 under 35 U.S.C. §112, second paragraph, is overcome. Withdrawal of the rejection is therefore respectfully requested.

Claims 41 and 42 are rejected under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

More specifically, the Examiner contends that the recitation of "...wherein the high stringency conditions comprise 0.1XSSC/0.1% (w/v) SDS at 65°C for 30 minutes for washing conditions", in claim 42, introduces new matter into the claim, allegedly because these hybridization and wash conditions were not disclosed or described in the specification as originally filed.

Applicants observe that the Examiner has not explained what new matter is introduced in claim 41. In any event, claim 41 has been canceled, as submitted above. The

conditions recited in original claim 41 are now included in claim 39. Support for the conditions

presently recited in claim 39 is found in the specification, e.g., at page 6, lines 17-26.

As to claim 42, the conditions recited therein are disclosed in the specification, e.g., at

page 43, line 22. There, the specification does not specifically mention that these conditions are

"high stringency conditions". However, Applicants respectfully submit that it is apparent to

those skilled in the art that these conditions are high stringency conditions.

Accordingly, it is respectfully submitted that the rejection of claims 41 and 42 under

35 U.S.C. §112, first paragraph, is overcome. Withdrawal of the rejection is therefore

respectfully requested.

In view of the foregoing amendments and remarks, it is firmly believed that the

subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,

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